

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P401114

Luminaire Tested: **ENT-SA1B-735-U-SLL**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-7)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1B-735-U-SLL
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2847 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

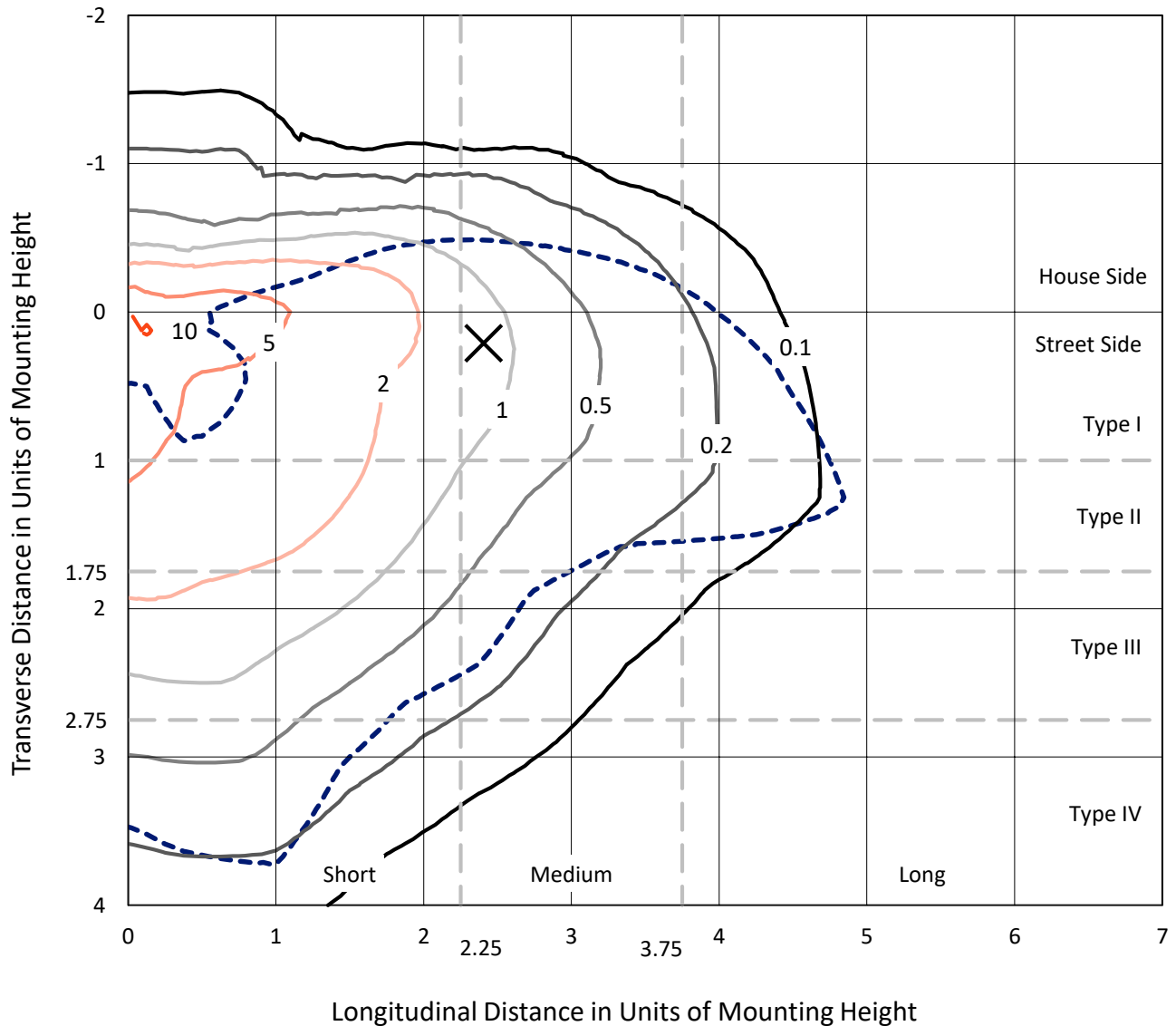
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

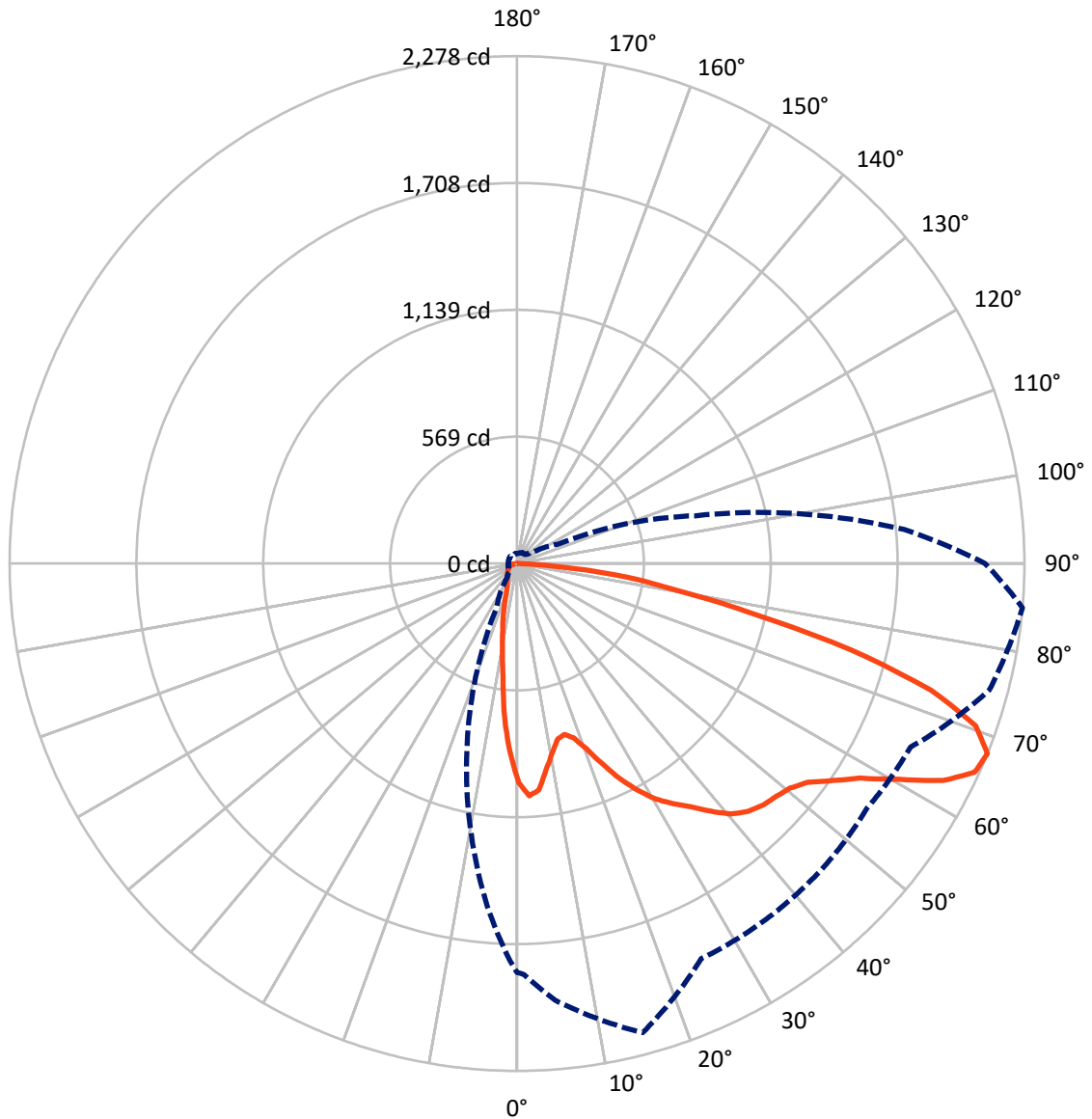
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	573.6	0.0	573.6
	% Fixture	20.1	0.0	20.1
Street Side	Lumens	2273.4	0.0	2273.4
	% Fixture	79.9	0.0	79.9
Total	Lumens	2847.0	0.0	2847.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.8	2.6
10°-20°	147.5	5.2
20°-30°	206.1	7.2
30°-40°	290.5	10.2
40°-50°	402.5	14.1
50°-60°	565.6	19.9
60°-70°	691.5	24.3
70°-80°	406.4	14.3
80°-90°	62.2	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2847.0	100.0
0°-180°	2847.0	100.0



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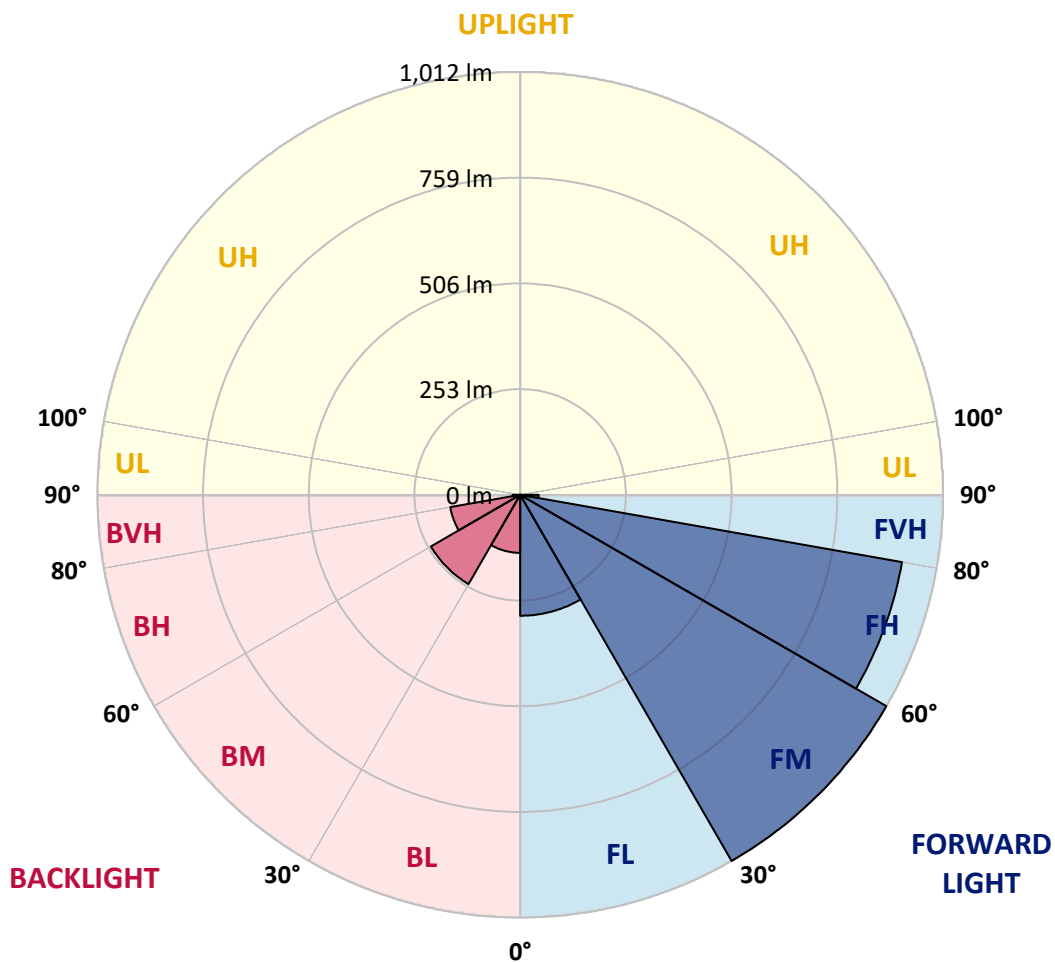
CATALOG NUMBER: ENT-SA1B-735-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.4	10.2			
FM	(30°-60°)	1012.0	35.5			
FH	(60°-80°)	927.9	32.6			G1/1800
FVH	(80°-90°)	44.0	1.5			G1/100
BL	(0°-30°)	138.9	4.9	B1/500		
BM	(30°-60°)	246.6	8.7	B1/1000		
BH	(60°-80°)	169.9	6.0	B1/500		G1/500
BVH	(80°-90°)	18.2	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6
2.5°	1010.6	1006.0	1021.6	1044.5	1060.0	1071.0	1074.7	1074.2	1071.0	1062.3	1044.0
5°	965.7	961.6	993.2	1044.0	1088.4	1120.4	1129.6	1116.8	1100.8	1066.9	1022.0
7.5°	880.6	887.0	927.3	998.7	1070.1	1120.9	1133.3	1113.1	1080.2	1011.0	935.5
10°	816.1	819.3	864.6	950.6	1026.6	1078.8	1100.3	1082.4	1039.4	952.0	864.6
12.5°	776.2	779.5	823.4	903.0	984.0	1024.8	1031.2	1030.7	995.0	910.4	809.2
15°	781.7	785.9	829.8	895.7	941.5	959.3	959.8	964.8	954.3	889.8	795.9
17.5°	834.8	834.8	876.9	916.8	906.2	893.4	903.0	912.2	930.5	902.1	822.9
20°	918.6	922.3	961.2	954.3	890.2	858.2	846.7	862.8	919.5	939.2	886.6
22.5°	1009.2	1018.8	1059.6	1009.2	887.5	825.2	812.4	829.8	920.9	997.8	974.0
25°	1109.5	1121.4	1148.8	1073.3	895.7	806.9	798.2	814.7	924.5	1051.8	1068.3
27.5°	1201.0	1201.9	1228.9	1127.3	917.2	808.7	794.1	815.6	934.6	1094.3	1151.6
30°	1266.0	1266.0	1277.9	1154.8	943.8	820.2	797.8	829.3	948.8	1117.7	1227.1
32.5°	1325.5	1328.7	1322.7	1183.6	968.9	836.7	806.5	856.8	971.2	1136.9	1285.2
35°	1401.0	1400.5	1374.0	1206.5	992.3	854.5	828.0	891.6	1003.7	1165.3	1340.6
37.5°	1494.4	1489.8	1433.5	1227.1	1020.7	885.2	868.7	939.2	1047.2	1198.7	1410.6
40°	1579.0	1571.7	1488.0	1246.3	1043.1	944.7	935.1	998.2	1102.1	1240.4	1478.8
42.5°	1645.0	1634.0	1534.2	1260.0	1077.0	1038.1	1046.3	1104.4	1157.5	1277.4	1521.4
45°	1700.3	1688.9	1569.0	1266.9	1158.9	1171.2	1187.3	1235.8	1216.6	1287.5	1547.5
47.5°	1740.2	1721.4	1584.1	1287.0	1269.6	1326.9	1376.3	1379.5	1299.9	1287.0	1563.5
50°	1763.5	1742.9	1598.3	1336.9	1398.3	1503.5	1556.2	1531.4	1386.4	1295.3	1586.4
52.5°	1810.6	1789.1	1657.3	1417.9	1530.1	1682.5	1710.9	1671.0	1476.1	1337.8	1632.1
55°	1929.2	1919.6	1771.7	1526.9	1659.6	1827.1	1839.9	1800.1	1569.9	1411.5	1719.6
57.5°	2063.3	2042.2	1926.4	1663.7	1783.6	1940.2	1960.8	1905.8	1668.3	1515.0	1817.0
60°	2100.8	2096.7	2057.3	1823.5	1911.8	2061.0	2062.4	1992.3	1783.2	1638.1	1965.8
62.5°	2045.9	2059.2	2111.8	1971.3	2019.3	2142.0	2130.6	2057.8	1903.6	1834.0	2146.6
65°	1950.2	1969.0	2074.7	2110.9	2044.1	2126.0	2101.7	2055.5	1979.5	2045.0	2258.7
67.5°	1835.4	1845.4	1968.5	2180.5	1957.6	1949.8	1938.3	1917.3	1949.3	2195.1	2277.9
70°	1715.9	1724.6	1838.1	2084.8	1698.0	1608.8	1599.2	1580.9	1705.8	2193.3	2183.7
72.5°	1446.3	1440.8	1545.6	1740.2	1296.6	1175.4	1256.8	1217.0	1379.9	1970.4	1945.2
75°	898.5	928.7	1060.0	1220.2	888.4	805.1	917.7	907.6	1120.4	1696.7	1548.8
77.5°	547.4	553.4	627.5	760.7	535.0	557.9	590.0	652.2	830.7	1375.4	1079.7
80°	286.5	266.4	320.8	417.4	317.6	374.4	432.5	501.2	527.3	896.6	721.8
82.5°	82.8	82.4	108.5	174.8	150.6	184.0	218.3	314.9	345.6	533.2	494.3
85°	0.5	0.5	0.5	0.9	1.4	2.3	9.6	81.0	107.1	247.2	203.2
87.5°	0.0	0.0	0.5	0.9	0.9	1.8	2.7	3.7	4.6	5.5	20.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6
2.5°	1038.1	1031.2	1016.5	996.9	983.1	959.3	954.3	939.2	924.1	911.7	912.2
5°	1000.5	977.2	941.5	900.3	860.9	825.7	818.8	798.2	792.3	786.3	769.8
7.5°	902.1	874.7	824.8	763.9	714.5	681.0	645.3	623.8	604.6	582.6	588.1
10°	826.6	787.2	718.6	647.2	585.4	540.5	501.2	481.0	453.1	433.0	430.2
12.5°	768.5	725.9	643.5	559.8	501.6	475.5	450.4	418.8	387.7	361.1	347.4
15°	749.2	701.2	605.5	522.2	476.5	444.9	409.6	373.5	335.5	307.1	296.1
17.5°	771.7	714.9	605.1	506.2	449.0	402.8	358.8	318.1	273.2	244.9	236.2
20°	833.5	762.5	617.9	491.1	415.6	352.9	291.1	247.2	201.4	181.2	172.1
22.5°	919.5	827.1	637.6	472.8	378.5	292.0	222.4	167.1	144.6	134.6	132.3
25°	1007.8	909.0	665.5	457.2	337.8	232.5	159.7	133.6	123.1	118.5	118.5
27.5°	1104.9	990.9	695.7	438.5	295.7	173.0	130.0	117.6	112.1	109.4	108.9
30°	1183.6	1057.7	730.0	416.5	257.7	141.9	115.3	107.1	102.1	100.7	100.7
32.5°	1240.4	1107.6	766.2	394.5	222.9	128.2	107.1	99.8	94.3	93.4	93.4
35°	1306.7	1155.2	782.7	382.2	201.8	119.5	101.2	93.8	88.8	86.5	86.5
37.5°	1386.4	1212.0	791.8	370.3	192.7	111.2	97.0	88.8	83.8	81.0	81.0
40°	1487.5	1276.5	801.4	358.4	187.2	104.4	92.5	84.2	80.1	76.9	76.9
42.5°	1559.8	1336.0	808.7	348.3	177.6	101.2	88.8	81.0	76.0	73.2	72.8
45°	1597.8	1391.4	811.9	342.4	166.6	103.9	86.0	78.3	72.3	69.6	69.1
47.5°	1623.4	1437.2	816.1	337.8	157.9	98.9	85.6	75.5	69.6	65.9	65.9
50°	1664.2	1497.6	826.6	329.1	152.9	92.5	92.5	74.1	66.4	63.2	62.7
52.5°	1736.9	1584.1	855.0	319.5	147.4	86.0	95.2	74.6	64.1	60.4	59.5
55°	1846.8	1721.8	902.1	305.7	139.6	78.3	88.8	75.1	61.8	58.6	57.2
57.5°	1989.6	1888.4	957.0	294.8	126.3	71.9	81.0	72.8	59.0	56.3	55.4
60°	2085.7	1999.7	991.8	280.6	107.6	67.7	69.6	70.5	56.3	53.1	52.6
62.5°	2137.4	2001.5	992.3	260.9	90.2	64.1	62.2	71.9	54.0	49.9	49.4
65°	2141.1	1904.0	942.4	235.7	84.2	60.0	57.2	63.6	51.7	47.6	47.1
67.5°	2101.3	1745.2	828.4	206.9	86.5	56.8	53.1	53.6	49.0	45.3	44.9
70°	1958.5	1539.7	664.6	184.0	87.0	52.6	49.9	48.5	46.2	43.0	42.1
72.5°	1689.8	1286.6	503.5	176.7	88.3	49.4	46.2	44.9	43.0	40.3	39.4
75°	1275.1	1003.7	378.1	164.8	89.3	45.8	42.1	41.2	39.4	36.6	36.2
77.5°	881.1	744.2	262.7	139.1	79.6	41.7	38.0	37.1	35.7	33.0	32.5
80°	595.0	510.3	161.1	104.4	60.4	36.6	33.0	33.0	31.6	28.8	28.8
82.5°	414.2	381.3	92.9	68.2	43.9	30.2	28.8	28.8	27.5	24.7	24.3
85°	173.0	230.7	41.7	37.1	30.7	23.8	23.8	24.3	22.9	20.6	20.1
87.5°	6.0	24.7	16.5	17.4	18.3	16.5	18.3	18.3	17.9	16.0	15.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6
2.5°	898.9	893.0	874.7	872.4	858.6	857.7	863.7	853.6	854.5	866.9	865.0
5°	773.5	759.8	759.3	744.2	727.3	723.2	708.5	703.0	700.7	695.7	714.0
7.5°	605.1	598.7	604.2	602.3	586.8	578.1	546.9	523.1	511.2	516.3	517.7
10°	430.2	439.8	454.5	468.7	457.7	428.9	415.6	396.4	394.1	392.7	401.9
12.5°	341.0	330.0	336.9	341.9	331.4	319.0	313.5	305.3	309.9	320.4	326.3
15°	283.3	264.1	255.4	249.4	252.2	244.9	247.6	244.9	248.1	251.3	262.3
17.5°	223.8	216.9	200.5	192.7	193.1	189.9	190.9	190.4	188.6	195.9	204.6
20°	168.4	166.6	162.9	157.4	158.4	156.1	154.7	146.9	143.7	146.0	153.3
22.5°	131.4	133.6	135.9	135.5	137.8	131.8	126.3	119.5	118.5	119.0	120.8
25°	117.6	118.5	120.4	122.7	124.0	118.5	110.8	106.6	106.2	107.1	107.1
27.5°	109.4	108.5	110.8	113.5	115.3	108.5	102.1	98.4	97.5	96.6	96.1
30°	100.7	100.7	102.5	105.3	106.6	100.7	95.2	91.5	89.3	87.9	87.4
32.5°	94.3	94.7	95.7	97.5	99.8	93.8	89.3	86.0	81.9	80.6	79.6
35°	87.0	88.8	90.2	90.6	92.5	88.3	83.8	78.7	75.1	73.7	73.7
37.5°	81.0	82.4	84.7	84.2	85.6	82.8	77.8	72.3	70.5	70.0	69.6
40°	76.4	76.4	78.3	80.1	81.9	76.9	70.9	68.2	66.8	65.9	66.4
42.5°	72.3	71.9	71.9	75.1	78.3	70.9	65.9	64.1	63.6	62.7	63.2
45°	68.7	68.2	66.8	68.2	72.8	65.0	61.8	60.4	60.0	60.0	60.0
47.5°	65.5	64.5	62.7	63.2	66.4	60.4	57.7	57.2	56.8	56.8	57.2
50°	61.8	60.9	59.5	59.0	60.0	57.2	54.9	54.0	54.0	54.0	54.9
52.5°	58.6	58.1	56.3	55.8	56.3	54.5	52.2	51.7	51.7	51.7	53.1
55°	56.3	55.4	54.5	53.6	54.5	52.2	50.3	49.4	49.4	50.3	51.3
57.5°	54.0	53.1	52.6	51.7	52.6	50.3	48.5	47.6	48.1	48.5	48.5
60°	51.7	50.8	50.3	49.4	50.8	48.5	46.7	46.2	46.2	45.8	45.8
62.5°	49.4	49.0	48.1	47.1	49.0	46.2	44.9	43.9	43.5	43.5	43.5
65°	46.7	46.2	45.8	45.3	46.2	43.9	42.6	42.1	41.2	40.7	41.2
67.5°	44.4	44.4	43.5	42.6	43.9	41.2	40.3	39.8	38.4	38.0	38.4
70°	41.7	41.7	40.7	40.3	42.1	38.4	37.5	37.1	36.2	35.7	35.7
72.5°	38.9	38.9	38.0	37.5	39.8	35.7	34.8	34.3	33.0	32.5	32.5
75°	36.2	35.7	35.2	34.8	37.5	33.0	31.6	30.7	29.3	28.8	28.4
77.5°	33.0	32.5	31.6	32.0	33.9	29.3	27.5	27.0	25.6	25.2	24.7
80°	28.8	28.4	27.9	28.8	28.8	25.6	23.3	22.4	21.1	20.1	19.7
82.5°	24.7	24.3	24.3	25.2	23.8	22.4	19.7	17.9	15.6	14.2	13.7
85°	20.1	21.1	20.1	21.1	17.9	17.9	13.7	10.5	7.3	6.0	5.5
87.5°	15.6	16.0	15.6	16.0	12.4	11.9	6.4	3.7	0.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6
2.5°	878.8	879.7	899.4	919.0	931.0	960.7	975.3	991.8	1000.5	1010.6
5°	705.3	722.7	738.7	778.1	798.2	845.4	879.7	934.6	952.0	965.7
7.5°	532.8	558.8	578.5	627.5	665.5	724.1	784.0	849.5	868.2	880.6
10°	423.4	447.2	484.2	522.7	565.3	636.2	701.2	768.9	801.9	816.1
12.5°	355.6	393.6	437.1	472.8	506.7	558.8	641.2	726.8	761.1	776.2
15°	293.4	335.9	380.3	424.3	466.4	525.4	611.9	723.2	766.6	781.7
17.5°	233.0	267.8	312.6	365.7	427.0	502.1	617.4	762.1	815.2	834.8
20°	165.7	199.6	245.3	310.8	383.5	477.8	630.2	820.6	896.2	918.6
22.5°	125.0	143.7	185.8	250.4	344.6	458.6	650.4	900.7	989.1	1009.2
25°	109.8	116.3	137.8	200.0	305.7	441.2	676.9	980.4	1087.5	1109.5
27.5°	97.5	101.2	112.1	160.7	276.9	423.4	708.5	1066.4	1172.2	1201.0
30°	87.9	92.5	101.6	134.6	249.0	397.7	737.3	1143.8	1244.0	1266.0
32.5°	80.6	85.6	93.8	121.7	225.2	378.5	753.8	1201.4	1305.3	1325.5
35°	75.5	80.1	88.3	110.3	204.1	365.2	758.9	1258.7	1380.4	1401.0
37.5°	70.9	75.5	82.8	98.9	189.5	347.8	766.6	1326.9	1467.4	1494.4
40°	67.7	71.4	78.3	91.1	169.3	329.1	775.8	1406.5	1552.0	1579.0
42.5°	64.5	68.7	74.6	91.5	149.2	313.1	781.7	1467.8	1619.3	1645.0
45°	61.8	66.4	73.2	89.7	134.1	298.4	779.0	1519.1	1680.7	1700.3
47.5°	59.0	64.5	76.9	86.0	129.5	285.1	781.3	1568.5	1724.6	1740.2
50°	57.2	64.1	82.4	80.6	130.4	279.2	803.3	1627.6	1757.5	1763.5
52.5°	55.8	65.5	77.8	72.8	130.4	276.4	845.4	1722.8	1814.8	1810.6
55°	53.6	65.0	72.8	65.9	125.0	277.8	885.2	1848.6	1952.1	1929.2
57.5°	51.7	62.2	65.5	60.9	112.1	278.3	944.2	1954.8	2060.1	2063.3
60°	49.4	66.8	56.8	56.8	96.1	276.0	996.4	1953.0	2079.8	2100.8
62.5°	47.1	65.5	50.8	52.6	85.1	267.3	1028.0	1839.0	2007.0	2045.9
65°	44.4	51.7	46.7	49.0	80.6	245.8	983.1	1697.6	1908.6	1950.2
67.5°	41.2	42.6	42.6	45.3	78.7	213.3	870.1	1541.5	1785.0	1835.4
70°	37.5	38.0	38.9	43.0	73.2	183.5	708.5	1375.4	1652.3	1715.9
72.5°	33.9	34.3	34.3	38.9	68.7	158.4	501.6	1089.8	1379.5	1446.3
75°	29.8	30.2	29.8	33.9	60.0	118.5	298.0	689.3	822.9	898.5
77.5°	25.2	25.2	24.3	26.5	41.2	75.1	162.9	418.8	500.7	547.4
80°	20.6	18.8	15.6	16.0	22.4	43.0	72.8	240.3	274.6	286.5
82.5°	13.7	10.5	6.4	6.0	7.3	11.9	16.9	95.2	87.4	82.8
85°	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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